Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: Constance C. Iversen
PO Box 522
Culbertson, MT 59218

2. Type of action: Application for Beneficial Water Use Permit No: 40S 30051664

3. Water source name: Missouri River

4. Location affected by project: NW¼NE¼SW¼ Sec 8 T27N R55E Richland County
SE¼NW¼SW¼ Sec 8 T27N R55E Richland County

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

This project is to pump water out of the Missouri River for the purpose of water marketing. The application is for 2.25 CFS up to 500 AF of water annually from January 1 thru December 31. The point of diversion is located in the NW¼NE¼SW¼ Sec 8 T27N R55E Richland County and the place of use is SE¼NW¼SW¼ Sec 8 T27N R55E Richland County. The purpose of this application is the marketing of water to the oil industry. The applicant will use a water depot that can operate two discharge ports at the same time.

The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:
(Include agencies with overlapping jurisdiction)
Montana Natural Heritage Program
Montana Department of Environmental Quality Website (TMDL 303(d) Listing)
Montana Fish, Wildlife & Parks
National Wetlands Inventory

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity *- Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

Determination: Montana Department of Fish, Wildlife & Parks does not identify this portion of the Missouri River as chronically or periodically dewatered.

Water quality *- Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

Determination: The lower Missouri River is listed on the 2008 Montana 303(d) list as fully supporting agriculture, drinking water and industrial uses and partially supporting aquatic life and warm water fishery. Probable causes of impairment are flow regime alterations and water temperature. Probable sources are the impacts from the flow regulation and modification by the Ft. Peck Hydropower Dam. Primary contact recreation has not been assessed

This project will not significantly impact water quality.

Groundwater *- Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

Determination: *This is a surface water application and will have no significant impact to groundwater in this area.*

DIVERSION WORKS *- Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

Determination: The proposed means of diversion is a Cornell 4HH pump with a 51 hp motor. The pump will be positioned at the river and will use a floating system as an intake during the summer months. A frost proof suction will be used during the winter months. The suction will be protected from freezing by heated insulation blankets and a boiler system. Water will be pumped through a 10 inch buried pipeline, approximately 1350 feet long, to the water depot building. Inside the building a manifold will divide the water and run it through the two filters (Fresno model 248). Once filtered, the water will discharge through two outlets at 500 GPM each. The system is designed to deliver water by way of a side load hookup and can fill two trucks at the same time. The Applicant provided design drawings and specifications for the piping and building, pump curve, filter specifications, and information from tanker manufacturers to support the ability to side load trucks at 500 GPM. The outlets will be equipped with flow meters that will measure flow rate and volume, for billing purposes and to monitor total usage. The delivery will be set up for 4" truck side load only.

The diversion works will not have an impact on the channel, flow, barriers, riparian areas, dams and wells constructed in the area.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species *- Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

Determination: A report received from the Montana Natural Heritage Program indicates are several species of concern within the project area and a one-mile buffer area of the project.

The Bureau of Land Management lists the Townsend's Big-eared Bat, Blue Sucker, Sturgeon Chub and the Sauger as Sensitive; the Pallid Sturgeon, Piping Plover and the Whooping Crane as having special status. The U.S. Fish & Wildlife Service lists the Pallid Sturgeon and the Whooping Crane as Listed Endangered; the Piping Plover is listed as Threatened and the Townsend's Big-eared Bat as Sensitive.

The Least Tern and the Piping Plover prefer nesting sites on barren islands, sandbars and open shoreline. Their occurrence extends over multiple townships. Due to the numerous islands within the stream reach and the hundreds of miles of barren shoreline, this project will not have any additional impact on the nesting of the Least Tern and the Piping Plover. The pump intake will be screened to prevent the entrapment of fish.

The pump site for this project is located near an existing pump site, the pipeline will be located through a wooded area and the depot center constructed on an existing roadway. It is unlikely that this project will create any impacts to endangered or sensitive species in this area.

Wetlands *- Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: *According to the National Wetland Inventory website, there are two wetland types in the project area; Riverine or Palustrine wetlands. The Riverine wetland is located in the stream bed and the Palustrine wetland is adjacent to the river opposite the pump site. The pump site, and depot are located on lands previously disturbed due to agricultural or road construction activities.*

There will be no additional impacts to wetlands in the project area.

Ponds *- For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: This project does not involve a pond.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

Determination: The soil will be temporarily disturbed when the water and power lines are trenched in. Permanent degradation to the soil quality, stability or moisture content is not anticipated.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Determination: This project is located on land that is historically agricultural and will experience a brief disturbance during construction, but should not result in the establishment or spread of noxious weeds.

The control of noxious weeds is the responsibility of the property owner.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Determination: The power source is electric for this project and will not affect air quality.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.*

Determination: Not applicable; this project is not located on State Trust or Federal lands.
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DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: This assessment did not identify any additional impacts on environmental resources of land, water and energy.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: There are no known environmental plans or goals in this area.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: This project will not have an impact on recreational or wilderness activities

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: This project will not have an impact on human health.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*
Yes___ No_✓__ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: There are no regulatory impacts on private property rights.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) *Cultural uniqueness and diversity?* No significant impact noted.

(b) *Local and state tax base and tax revenues?* No significant impact noted.

(c) *Existing land uses?* No significant impact noted.

(d) *Quantity and distribution of employment?* No significant impact noted.

(e) *Distribution and density of population and housing?* No significant impact noted.

(f) *Demands for government services?* No significant impact noted.

(g) *Industrial and commercial activity?* No significant impact noted.

(h) *Utilities?* No significant impact noted.

(i) *Transportation?* No significant impact noted.

(j) *Safety?* No significant impact noted.

(k) *Other appropriate social and economic circumstances?* No significant impact noted.

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts: This assessment does not indicate possible secondary impacts on the physical environment and/or the human population.

Cumulative Impacts: This assessment does not indicate possible cumulative impacts on the physical environment and/or the human population.

3. *Describe any mitigation/stipulation measures:* N/A

4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:***

There are two alternatives available to the applicant. They are (1) the applicant may drill a groundwater well to supply water to the depot or (2) a no action alternative. If the applicant were to drill a well, there is no guarantee that the water would be available in the quality and quantity desired. If the applicant were to follow the no action alternative, they would be unable to profit by providing water to the oil industry.

PART III. Conclusion

1. Preferred Alternative

The preferred alternative is the diversion of good quality water from the Missouri River for the purpose of water marketing.

2 Comments and Responses

3. ***Finding:***

Yes___ No_✓_ Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain <u>why</u> the EA is the appropriate level of analysis for this proposed action:

An EIS is not required because the EA did not identify any significant impacts from the proposed project.

Name of person(s) responsible for preparation of EA:

Name: /s/ Ann L Kulczyk
Title: Water Resource Specialist
Date: December 9, 2011